

# BUNKERSPOT

## **MARKET VOLATILITY** CHANGING DYNAMICS WITHIN THE GLOBAL BUNKER INDUSTRY

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# Vacuum pact

Recycling is central to the ethos of sustainability and Vertex Energy has built its business on re-refined products. Rhys Berry spoke to CEO Ben Cowart about the company's ambitions to develop the profile of its vacuum gasoil in the marine fuels market



**H**ouston-headquartered Vertex Energy (Vertex) is one of an increasing number of sustainability-driven firms seeking to take full advantage of changing attitudes within the maritime sector. The company's primary focus is recycling used motor oil and other petroleum-co-product streams, purchased from an established network of local and regional collectors and generators.

'Used oil needed to find a new home,' Alvaro Ruiz, the company's VP of business development and M&A told *SSNLive* in December. 'Re-refining is the right way to recycle that used oil and make it available again, either as a fuel or as a base oil.'

While 100% of used oil in Europe, Canada and Australia is re-refined – either introduced into fuels or lubricants – Vertex estimates that in the United States the figure is more like 50% and it is keen to capture some of this untapped market potential.

The company sells its aggregated petroleum streams as feedstocks to other re-refineries and fuel blenders or as replacement fuel for industrial burners. In January, Vertex issued a letter to shareholders which reaffirmed the company's commitment to the development of marine fuels.

'The relatively new ECA fuel requirements fit well with our existing processing capabilities, particularly in the Gulf Coast,' explained chairman and chief executive of Vertex, Ben Cowart. 'Our vacuum gas oil (VGO) product can be sold into the marine fuel market at improved pricing relative

to traditional VGO markets. We intend to aggressively pursue this market in 2016.'

*Bunkerspot* caught up with Cowart to find out more.

#### **What is the background of Vertex Energy?**

The marine fuels sector is a new market for our company. We're the second-largest hydro-recovery company – primarily lubricants like used motor oil that would come out of any kind of lubrication application. The oil in your car, the oil on a ship, the oil in a manufacturing facility; these oils get contaminated and we're the second-largest refiner of that material.

We have three operating refineries across the US market. We process about 113 million gallons of that material and then we've got another fuel refining business in Port Arthur, Texas that is more transmix-based and chemical co-products. We bring those streams in and fraction them into gasoline blend stock, distillate and we also make a pi-gas for the ethylene market.

#### **Could you detail Vertex's product offering?**

We're pretty diversified. We're really an alternative energy company. We focus on the products that we produce, not necessarily the feedstocks that we use because they may vary depending on the different refineries we're operating.

What we have been able to do is develop technology in the company to make high-performing products. We've got a very high-quality base oil product that is produced in Ohio – a group 2, water white, hydro-treated base oil.

In our New Orleans facility, we have our

high purity VGO that we produce and that's the product we're promoting into the marine fuel market because of the quality of the product, the specs that we have and the location. We actually are in a position to ship this product globally because our finished products are stored on the Mississippi River and we have a 225,000-barrel finished product tank so we can load ships or do whatever we need to do there in the Port of New Orleans.

#### **What is the company's business strategy?**

Our business has always been aggregating and collecting the raw materials and bringing them to one of the four refineries; processing them and producing the finished products. The system has been in place and we've had the rateable feedstock and the end products have primarily gone to the major refineries as VGO, or feedstock that they convert back into gasoline diesel and base oil.

The reason we've been able to take this distillate and market it directly into the marine market is due to the fact that our predecessor was working on an expansion – we acquired this refinery in 2014 – but they had made substantial investments in the processing unit to produce a high purity VGO.

Then, in another location, they built hydro-treaters that were going to convert the VGO to base oil. We have this other marine facility in Belle Chase, Louisiana with our hydro-treating assets but the base oil market is pretty long right now so it doesn't make sense to further that project when this high-purity VGO now meets the new emission control area (ECA) requirements and we're able to provide a

discounted price to the bunker companies and provide value to the shipowner.

To date, we've sold this product into multiple marine applications over the last year so [the low-sulphur regulations have] opened up the market.

**What is the sulphur content of the VGO?**

Our sulphur content is about 0.08% -0.095% so we're right there at the 0.1% sulphur limit and it's a distilled product so there are no contaminants in it which would be of a concern to the ship engine.

What's interesting about our product is that our viscosity is much higher than ultra-low sulphur or Number 2 [distillate] diesel fuel so it functions somewhere in between the DMA gasoil specification and the heavy residual [fuel] because we're making it from an alternative feedstock.

We think the ships really like the product because of the lubricity and it certainly helps with thermal shock – switching from a heavy resid over to this low-sulphur, light product. Most ships tend to just stick with a standard DMA that's about six centiStokes (cSt) in viscosity.'

Our product is unique and it's also been blended into DMA so it works well that way as a blend component so we think the ship engine will really see a value in the quality of the product that we've produced in the Louisiana port.

**Since the establishment of ECAs, fuel prices have fallen dramatically. Has this hindered the company's progress at all, and have you had to rethink your approach?**

When we made the adjustment in our business plan and started heading towards this marine fuel market, crude oil was over \$100 a barrel so there was a tremendous amount of interest in our fuel. As oil prices have tumbled, the interest level for alternative fuels really slowed down – or at least they did in 2015 – now, things are starting to pick up with low oil prices so I can surmise that the initial fall in fuel was a direct saving to the shipowners. They were enjoying large fuel discounts and as competitive as the shipping industry is today, I assume those fuel prices now have been massaged back into their shipping rates to be more competitive and now they're more interested in how they can save money again, even at low fuel prices. So, we're seeing more interest, interestingly at the lower levels than

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we did after the sharp decline in early 2015.

**Where exactly is this interest coming from?**

We're working mainly with bunker companies so we're not dealing directly with the shipowner at this point and we've been working hard to introduce the product into the market, so it's a collaborative effort to get people aware of the product and of the quality of the product. It takes time and we're pleased with the product that we're making.

**Has Vertex undertaken pilot programmes in the development of this product?**

Most of the pilot work has been done through the bunker companies and we've had very good success – we've not had any major issues related to the product. We've engineered an extension to our process in Louisiana specifically for this fuel, so if it comes off our unit, we go through another engineering part of our process that really purifies and provides a high level of quality.

We've not been very aggressive to date. 2016 is the year that we'll start spreading the product out in the market with different companies and we really wanted to make sure that we were very solid on what we were doing first.

**What has been the industry response to the VGO ?**

The buyers like the fuel. We've had no push backs, no issues. The fuel's been used multiple times by the same ships and they prefer it so we're pretty encouraged by its performance.

**How would you distinguish yourselves from the rest of the 'hybrid' fuels market?**

[Fundamentally], I think technologies are very different. You can process crude a lot of different ways. Our technologies go from a fractionating column under vacuum to an evaporation process unit for the bottoms. At our Columbus refinery, we actually go to hydro-treaters where we de-sulphurise and

take it to a water white product. There are a lot of different ways to process oil. We choose the technologies that we've deployed because of the purity levels in the finished products which we produce. Our goal is to focus on high performing, high quality products so we have to deploy the right technology to get there.

**How would you describe the market profile of your products?**

We've got multiple markets for the products we produce. I could take this marine fuel today and take it to another facility that we have to hydro-treat it and I would have Group 2-based stock that could be used for lubricants. It's not a major concern. It's very versatile. You can put it back through the major refineries where they can produce finished motor fuels as well. We just believe we can provide more value to the marine market today because it's already refined at a high level for the ECA fuel spec so it's really unnecessary to ship it to a refinery and have them turn it into diesel fuel and other products when the ship is ready for it as it comes off our unit.

**Where is the fuel being supplied?**

Currently, it's available in the New Orleans market and the Port of Mobile, Alabama.

**Is the fuel price competitive with other fuel currently on the market?**

Yes, there's no question that it is. Put it this way – if it sells at gasoil pricing or DMA pricing, you're going to get a higher cetane number from the product; better lubricity and a higher flash point, and that will certainly help with thermal shock and other mechanical issues with the ship.

 Benjamin P. Cowart  
Vertex Energy, Inc.

 Tel: +1 281 486 4182  
 Web: [www.vertexenergy.com](http://www.vertexenergy.com)